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Zhodnocení finanční situace společnosti China Petrochemical

Financial Situation Assessment of the China Petrochochemical Corporation

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3. Basic Characteristics of the Company
4. Evaluation of Financial Situation of the Company
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Bibliography
List of Abbreviations
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Annexes

References:

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„I hereby declare that I have elaborated the entire thesis including all annexes myself."

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Contents

1 Introduction

Many business owners and company managers have found that insight gained from their examination of company financial statements can be invaluable. Such insight can help businesses improve their profitability, cash flow, and value. First of all, shareholders may have to take decisions whether they have to continue with the holdings of the company's share or sell them out. The financial statement analysis is important as it provides meaningful information to the shareholders in taking such decisions. Secondly, the management of the company is responsible for taking decisions and formulating plans and policies for the future. Therefore, they always need to evaluate its performance and effectiveness of their action to realize the company's goal in the past. For that purpose, financial statement analysis is important to the company's management. Thirdly, the creditors are the providers of loan capital to the company. Therefore they may have to take decisions as to whether they have to extend their loans to the company and demand for higher interest rates.

The financial statement analysis provides important information to them for their purpose. Last, the prospective investors are those who have surplus capital to invest in some profitable opportunities. Therefore, they often have to decide whether to invest their capital in the company's share. The financial statement analysis is important to them because they can obtain useful information for their investment decision making purpose. To deeply insight the meaningfulness of financial analysis of business organization, China Petrochemical Corporation is taken as an example in this thesis. SINOPEC is short for China Petrochemical Corporation. It is a super-large petroleum and petrochemical enterprise group which mainly does gas business in China with complete selling network and integrative market relationship. Therefore, it is highly valuable to analyze the financial situation of this company, so that can help to understand the importance of financial analysis for business.

The goal of thesis is to assess financial position by the help of financial statements of company for period 2010-2014.

This thesis is divided into five parts. The first chapter is introduction and the last chapter is Conclusion, and there are main chapters of the thesis.

In chapter 2, we will introduce the financial analysis methodology. We will describe three financial statements, include financial statement, income statement and cash flow statement, and then we will characterize the common-size analysis, financial ratios analysis and we define the methods within pyramidal decomposition.

In chapter 3, we introduce some basic information about the analyzed company, such as its history, development, culture.

In chapter 4, we will analyze the financial situation of the company by using common-size analysis of balance sheet, income statement and cash flow statement. Then, financial ratios analysis is used to conduct the analysis of liquidity ratios, activity ratios, solvency ratios and profitability ratios of the company. Next, Dupont analysis is used to demonstrate the method of gradual changes

2 Characterization of the Financial Analysis Methodology

The chapter is based on Dana Dluhošová (2014) and Richard A. Brealey (2011). With the process of economic and technology globalization, the competition situation faced by enterprise gets more serious, whose successes tend to rely more on comprehensive management.

Financial analysis is key in any company or enterprise, it is one of the most important components of enterprises management, permeating in every fields and links of enterprises.

Scientific financial analysis is helpful to improve the correctness and reliability of accounting information, ensure the smooth progress of production and economic management activities to protect the assets of the safety integrity. Thus it provided the basis for the enterprise managers in making decisions.

In this chapter, we will describe financial analysis methodology that will be used in following chapters.

First, we introduce what is the financial statements. It includes balance sheet income statement and cash flow statement. In the second part, we will describe something about the common-size analysis. According to analysis case by case, we will understand the vertical common-size analysis and horizontal common-size analysis. Third, we will introduce liquidity ratios, activity ratios, solvency ratios and profitability ratios. They are collectively referred to as financial ratio analysis. In the last part, we introduce pyramidal decomposition, it includes gradual changes, logarithmic decomposition method and function decomposition method.

2.1 Financial statements

Financial statements, a written record of the financial condition of a company. It records the company's financial activities. Here are three basic financial statements. Let's explore these concepts in the context of a specific example.

2.1.1 Balance sheet

Balance sheet is financial report form that reflects the total sum, formation and relation of the assets, debts, the owner's rights and interests of an enterprise on a certain date. The total of debit balances of all asset accounts is equal to the total of credit balances of all liability and owner's equity accounts. It is a static embodiment of business activities.

Purpose of balance sheet analysis is to understand the financial situation of enterprises. Moreover, it can also evaluate the quality of accounting information provided in the report. On this basis, researchers can make an objective assessment of the corporate interests, changes in assets, as well as the financial situation of enterprises. Balance sheet can reveal various economic resources owned or controlled enterprises to the people. The total size of resources and specific distribution structure are also reflected in these analysis. Different forms of assets will produce different effects on business activities. Thus, the analysis of the structure of the company's assets can judge the quality of corporate assets.

Table 2.1 Items of balance sheet

Balance sheet	
Current assets	**Current liabilities**
Monetary capital	Short-term borrowing
Trading financial assets	Account payable
Notes receivable	Notes payable
Account receivable	Trading financial liabilities
Inventory	Dividends payable
Prepayment	Other payable
Other current assets	Non-current liabilities within a year
Total current assets	Total liabilities
Long-term assets	**Long-term liabilities**
Long-term receivable	Long-term loan
Loans and payments behalf	Bonds payable
Goodwill	Long-term payable
Available for sale financial assets	Other non -current liabilities
Deferred tax assets	Total long-term liabilities
Long-term equity investment	Total liabilities

Long-term amortized expenses	**Equity**
Other non-current assets	Paid up capital
Total long-term assets	Undistributed profit
Total assets	Translation reserve
	Minority equity
	Parent company's owner equity
	Owners' equity
	Liabilities and equity

Source: Richard A. Brealey (2011).

$$Total\ assets = Total\ liabilities + total\ equity \tag{2.1}$$

Current assets unrestricted cash or other asset held for conversion within a relatively short period into cash or other readily convertible asset or currently useful goods or services. It have a life span of one year or less. Long-term assets with more use of funds, slow turnover, and poor liquidity characteristics.

Short-term liability is debt of a business that are to be paid within the normal operation cycle or a period of a year or less. Short term debt financing, including commercial credit and short-term borrowings. It has the characteristics of fast speed, good elasticity, low cost and high risk. The long-term liabilities refers to a debt whose payback period is longer than year or which will be repaid during an operation cycle that is longer than a year.

Shareholders' equity is a very important financial index, which reflects the company's own capital. When the shareholders' equity is less than zero, the company ran into the insolvent situation, at this time, to the shareholders of the company will disappear. If the bankruptcy liquidation, shareholders will be nowhere. On the contrary, the greater the amount of shareholders equity, the company's strength is more abundant.

2.1.2 Income statement

An income statement is an accounting statement that reflects the operating results of an enterprise for a certain accounting period.

Table 2.2 Items of income statement

Revenue
Cost of goods sold
Gross profit
Marketing and sales expenses
General and administrative expenses
Operating profit
Other income and expenditure
Earnings before interest and taxes (EBIT)
Net finance charges
Income tax
Net profit or income after taxes
Minority interest
Income to shareholders

Source: According to Richard A. Brealey (2011).

$$\text{Re}\,venues \quad Expenses(\cos t) = Net\ Income / Loss \tag{2.2}$$

The income statement can be used as the basis for the distribution of the operating results. Income statement reflects a certain period operating income, operating costs, operating expenses and business tax, the expenses for the period and operating income and other projects and then calculate the profit. The data in the income statement directly affect the interests of many related groups, such as the tax revenue of the state, the bonus of the management staff, the wages of the employees and other remuneration, shareholders' dividend. It can be used to analyze the profitability of the enterprise, and forecast the future cash flow of the enterprise.

2.1.3 Cash flow statement

Cash flow statement is an accounting statement which state the operation activities, investment activities and financing activity by the in flow, out flow and totaling of cash.

Operation activities including cash received from the sale of goods, services, operating leases and other activities，as well as in order to buy goods, advertising, pay taxes and other activities to pay in cash.

Investment activities，the main cash outflows included in this category are payments to purchase property, plant, and equipment, to purchase debt or equity securities of other entities, and to make loans to other entities.

Cash flows from financing activity include cash flows resulting from obtaining cash from creditors and repaying the amounts borrowed and obtaining capital from owners and providing them with a return on their investment.

The composition content of the cash flow statement is consistent with the balance sheet and the income statement. It is better than the traditional income statement to evaluate enterprise's profit, financial status and financial management.

Table 2.3 Items of cash flow statement

Cash provided by operations
Net income
Non-cash expenses
Depreciation and amortization
Changes in working capital
Decrease (Increase) in accounts receivable
Decrease (Increase) in inventories
Increase(decrease) in accounts payable
Decrease(increase)in other current assets
Total decrease(increase)in working capital
Cash provided by operations
Cash provided from investments
Cash provided by(use for)disposal of(additions to) property, plant, and equipment
Sales(acquisitions) of other investment
Cash provided by(used for) investments
Cash provided by (Used for)Financing Activities
Additions to(reduction in)short-term debt
Additions to(reduction in)short-term debt
Dividends paid
Net issues(repurchases) of stock
Other
Cash provided by (Used for)Financing Activities
Net increase(decrease) in cash and cash equivalents

Source: According to Richard A. Brealey (2011).

Free cash flow has three parts. First, the cash that the firm generates from its ongoing operations is equal to earnings before interest and tax (EBIT) plus taxes minus depreciation.

Not all of this cash is available to the firm's investors, however, as we are discussed, net investments in working capital, such as inventory or receivables, soak up cash. we must subtract the change in net working capital. In addition, the form needs to invest in fixed assets, and these investment also use cash, thus,

$$FCF_t = EATt + DEPt - \Delta NWCt - INVt, \quad (2.3)$$

where FCF_t is free cash flow, EAT_t is earnings after taxes, DEP_t is depreciation, ΔNWC_t is change in net working capital, INV_t is initial value.

2.2 Common-size analysis

The data in the financial statements reflect the enterprise's performance. But the stand or fall of performance is often relatively. This is the result of different period data to compare. There should be some similar nature between the comparison objects. Such as form of organization, financial structure and business types.

The key to common-size analysis lies in converting the numbers in the financial statement into a percentage. There are stated the advantage, first, companies of different scales can be compared each other. Secondly, it can make a structural analysis on the companies by comparison with other companies. Thirdly, it provides information of great use to companies.

The analysis of the structure of the company's assets can judge the quality of corporate assets. By comparing the same corporate balance sheets at different time points, the researchers can determine the development trend of the financial situation. Similarly, by comparing different companies' balance sheet in the same point in time, researchers can also evaluate the financial situation of different enterprises.

2.2.1 *Vertical common-size analysis*

Based on the total assets or the total amount of the liabilities and stockholders' equity. It is expressed in percentage terms, calculate the proportion of each item in financial statement.

In a vertical analysis the working principle would be computed as:

$$E\% = \frac{X_i}{\sum X_i} \bullet 100\% \tag{2.4}$$

where $E\%$ is the proportion of the project, X_i is the item, $\sum X_i$ is sum of item

2.2.2 *Horizontal common-size analysis*

When analyzing financial statements during a certain period, a comparison between the financial statements in the analytic period and that in early periods is very important. Horizontal common-size analysis by comparing the data before and after the absolute change and percentage change to reflect the company's financial situation. The relevant points of the horizontal common-size analysis would be computed as:

$$Absolute\ change = U_t - U_{t-1} \tag{2.5}$$

$$Percentage\ \ change = \frac{U_t - U_{t-1}}{U_{t-1}} \tag{2.6}$$

where U_t is amount of analysis period, U_{t-1} is amount of previous period.

2.3 Financial ratio analysis

Financial ratio analysis helps us identify some of the financial strengths and weaknesses of a company.

In this chapter we will introduce four types of financial ratios, The liquidity ratios reflects the company's ability to use current assets to repay debts, the activity ratios reflects the company's efficiency of using funds, the solvency ratios reflects company's ability to repay, the profitability ratios reflects the company's ability to get profit.

2.3.1 Liquidity ratios

Liquidity refers to the ability of an investment to be quickly converted into cash. Companies have assets with different degrees of liquidity. For example, accounts receivable and inventory usually has a good liquidity. It is very strong cashability but real estate may be quite illiquid. It can be hard to find a buyer and close a deal at short notice.

Investors want to know whether the company can lay its hands on the cash to repay them. We must focus on liquidity. In this part, we will introduce three ratios, current ratio, quick ratio and cash ratio.

Current ratio is the most common ratio using current asset and current assets divided by current liabilities. It evaluating a company's ability to generate the cash necessary to pay its short-terra liabilities. The more liquid assets, the less short-term debt the solvency of the stronger. Normally, operating cycle, accounts receivable and inventory turnover speed is the main factors influencing the liquidity ratio. When the flow rate is less than 1, it means that the company's liquidity is weak, relatively small margin of safety, lack of operating capital. Even if all of the current assets became cash, it is not enough to cover the current liabilities. When the current ratio between 1-3, indicating corporate short-term liquidity is strong, and the stock of liquid assets appropriate, will not affect

the profitability of the enterprise. When the current ratio greater than 3, indicating the company's short-term liquidity is quite strong, but the stock excess will affect the profitability of the enterprise. The current ratio would be computed as:

$$Current\ ra\ tio = \frac{current\ as\ sets}{current\ li\ abilities} \tag{2.7}$$

Quick ratio is the measurement of the company's ability to reimburse current liabilities and it is an important indicator of current ratio. Because in the current assets, some of the inventory cashability is slow. Even has been devalued. So, to current assets deducted from inventory, and then compared with current liabilities, measure a firm's ability to meet short-term obligations. If the quick ratio is below 1, enterprise's solvency is low.

Cashability enhancement: available bank loans, long-term assets will soon be converted into cash, the reputation of the enterprise.

Cashablility abate: if there are no records in the contingent liabilities.

The quick ratio would be computed as:

$$Quick\ ratio = \frac{current\ as\ sets\text{-}inven\ tory}{current\ li\ abilities} \tag{2.8}$$

The last one is a cash ratio. A company's most liquid assets are its holdings of cash and marketable securities. That is why analysts also look at the cash ratio. Cash ratio best reflects the ability of companies to pay direct current liabilities. Generally speaking, the cash ratio above 0.2 is appropriate. However, if the ratio is too high, it means that the enterprise failed to rational use of current liabilities, thus leading to low profitability of the cash asset class.

The cash ratio would be computed as:

$$Cash\ ratio = \frac{cash + marke\ table\ \ \sec urities}{current\ li\ abilitie} \tag{2.9}$$

2.3.2 Activity ratios

What factors contribute to a firm's overall profitability? One factor clearly must be the efficiency with which it uses its many types of assets. Activity ratios is a very important index. It is one of several accounting ratios that measure how quickly a company can convert its asset to cash, or revenue. Meanwhile, companies' managers use activity ratios as guides to assess how efficiently the company manages assets such as inventory, receivables and fixed assets, as well as the current liabilities, accounts payable.

Account receivable turnover (ART), receivable account is a kind of claimable income by selling goods in stock on credit, through which enterprises can promote their market share and increase profit. Account receivable turnover is higher .The faster it recycling. On the other hand, large quantity of accounts receivable brings difficulties to the normal operation of enterprise, it endangers the normal turnover of funds seriously. The account receivable turnover would be computed as:

$$ART = \frac{credit\ sal\ es}{account\ re\ ceivables} \tag{2.10}$$

Inventory turnover (IT) helps measure how well an organization manages its inventory. The higher the inventory turnover, the lower the levels of inventory, the stronger the liquidity, inventory can be converted into cash or accounts receivable to collect the faster.

The inventory turnover would be computed as:

$$IT = \frac{\text{cost of goods sold}}{\text{Average inventory}} \tag{2.11}$$

Average collection period (ACP) is another way to measure the efficiency of the credit operation is by calculating the average length of time for customers to pay. The faster the firm turns over its receivables, the shorter the collection period. The average collection period would be computed as:

$$ACP = \frac{\text{account receivable}}{\text{credit sales}} \ 360 \tag{2.12}$$

Total assets turnover (TAT) is equal to the net sales divided by total assets. This is a measure of how well assets are being used to produce revenue. It is used to examine the enterprise's operating efficiency. In general, the higher the total asset turnover, the stronger the enterprise sales ability, the higher the assets utilization. Asset turnover is a key financial ratio to measure the efficiency of enterprise asset management. It embodies the transfer rate of all assets during the business from input to output, reflecting the enterprise management quality and efficiency of all of the assets. The total asset turnover would be computed as:

$$TAT = \frac{revenues}{assets} \tag{2.13}$$

2.3.3 Solvency ratios

Benefit on financial leverage is a method by which the enterprises utilize the debts to adjust the capital gains of the rights and interests. If the using extent and methods were different, the effect will be very different, because debt increases returns to shareholders in good times and reduces them in bad times. In this part we will introduce three ratios, including debt ratio, debt-to-equity ratio and interest coverage.

Debt ratio is the proportion between the liabilities and the whole assets. The different figures of debt ratio express different meanings. The higher the ratio is, the higher the strain of paying principal and interest is, and the higher the risk of solvency is. Creditors will be cautious on higher debt ratio, and they will be interested in the lower debt ratio. Companies should control the scale of liabilities, keep rational liabilities rate and enhance the ability of paying back the debts. The debt ratio would be computed as:

$$Debt\ ratio = \frac{Total\ debt}{Total\ assets} \tag{2.14}$$

Debt-to-equity ratio is the proportion between the liabilities and the equity. By calculating the ratio, we can know how much money shareholder are providing and how much money creditors are providing, to evaluate the risk of enterprise. The lower the ratio, explain the enterprise long-term financial situation better, the creditor loans safely guaranteed. The debts-to-equity ratio would be computed as:

$$Debts\text{-}to\text{-}equity\ ratio = \frac{Total\ debts}{Equity} \tag{2.15}$$

Interest coverage ratio (ICR), times interest earned ratio: net income before interest expenses divided interest expenses. It's large, long-term debt paying ability stronger. The interest coverage would be computed as:

$$Interest\ \ coverage = \frac{EBIT}{Interest\ paid} \tag{2.16}$$

where $EBIT$ is Earnings before Interest and Taxes.

2.3.4 Profitability ratios

The profitability is reflected by the performances in the form of net income earned, and by the potential profit-earning ability. The stronger the profitability, the higher the return to shareholders. Profit is a key concept of accounting, and the profit information is much concerned with the investors, creditors and other related parties. So, profitability ratios is a very important index.

Operating profit margin (OPM) refers to the ratio of operating profit and operating income of the enterprise. It is a measure of the efficiency of business indicators, reflecting the considering of operating costs, the ability of managers to obtain profits by management. The higher the ratio, indicating that social enterprises create more new value, the greater the contribution, but also reflect the increase in the same time for enterprises to create more profits to achieve a production increase. The operating profit margin would be computed as:

$$OPM = \frac{EBIT}{\text{Re}\,venue} \tag{2.17}$$

where $EBIT$ is earnings before interest and taxes

Net profit margin (NPM) is the amount after deducting each cost, expense and taxes.Net profit margin is important index for profitability evaluation. It is the same as operating margin, the greater the value, the higher profitability of the enterprise. The profit margin would be computed as:

$$NPM = \frac{EAT}{\text{Re}\,venue} \tag{2.18}$$

where EAT is earning after taxes.

Return on assets (ROA) measures the income available to debt and equity investors per dollar of the firm's total assets. It is an indicator of the effect of comprehensive utilization of corporate assets, but also an important indicator to measure the profit generated by the total creditors and owners' equity. The return on assets would be computed as:

$$ROA = \frac{EAT}{Assets} \tag{2.19}$$

where EAT is earning after taxes.

Return on equity (ROE), we measures the return on equity(ROE) as the income to shareholders per dollar invested. The return on equity would be computed as:

$$ROE = \frac{EAT}{Equity} \tag{2.20}$$

where EAT is earning after taxes.

2.4 Pyramidal decomposition (Dupont analysis)

One of the basic take for financial analysis is to perform the analysis of increments in synthetic indicators as well as to search for and to quantify factors, which mostly contribute to such changes .The Dupont System is a method which uses internal relations of financial rates to analyze and judge of financial affairs state of a company, it analysis the synthetic indicators of return on equity (ROE).

The rate of return on equity (ROE) reflects the relation of net profit and owner's equities. It is most comprehensive and representative in all the financial indicators.

We can said that ROE is the top synthetic indicators or basic ratio. It would be compute as:

$$ROE = \frac{EAT}{Equity} \tag{2.21}$$

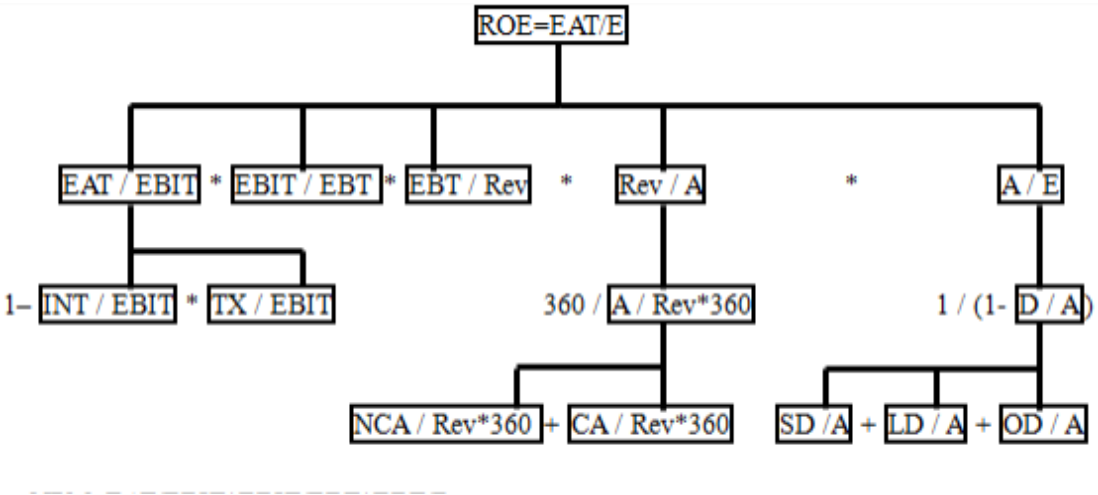
where EAT is earnings after taxes.

This can be split up, into the following indicators: tax burden, interest burden, operating margin, assets turnover and financial leverage. It means these factors are component ratio. It would be compute as:

$$ROE = \frac{EAT}{Equity} = \frac{EAT}{EBT} \bullet \frac{EBIT}{EBIT} \bullet \frac{EBIT}{\mathrm{Re}\,v} \bullet \frac{\mathrm{Re}\,v}{Assets} \bullet \frac{Assets}{Equity} \tag{2.22}$$

where EAT is earnings after taxes, $EBIT$ is earnings before interest and taxes. $\mathrm{Re}\,v$ is revenues.

Chart 2.1 Structure of DuPont Analysis



Source: Dana Dluhošová (2014)

From the Chart 2.1 we can clearly see the structure of the DuPont analysis *Rev* is revenues, *A* is total assets while *FA* and *CA* mean fixed assets and current assets, *E* is total equity, *D* means

debts and *SD, LD, OD* means short-term debt, long-term debt and other debt. *INT* is interests and *TX* is taxes. All of these parts are the factors that influence the value of ROE.

DuPont Analysis is used to know about the influence of these factors, and for analyzing of DuPont analysis, we need some indicators to show us the change between two years of ROE and its component ratios including absolute change, relative change and index of change, three changes would be compute as:

$$Absolute\ change: \Delta a_{abs} = X_1 - X_0 \tag{2.23}$$

$$raletive\ change: \Delta_{ral} = \frac{X_1 - X_0}{X_0} \tag{2.24}$$

$$Index\ of\ the\ change: \Delta_{ind} = \frac{X_1}{X_0} \tag{2.25}$$

And then, we will use three method to analysis each part of the influence on business performance, including gradual changes method, logarithmic decomposition method and functional decomposition method.

Dana Dluhošová said for each method, the derivation and justification are performed. Assuming a multiplicative relationship, the base ratio x can be expressed by means of component ratios a_i in the following way: $x = \prod_i a_i = a_1 \bullet a_2 \bullet \ldots a_n$. Then, the variation in the base ratio, Δy_x, should be decomposed into the impacts of component ratios, ΔX_{ai}, so that $\Delta y_x = \sum_i \Delta X_{ai}$.

2.4.1 Gradual changes method

The impacts can be computed generally as follows:

$$\begin{aligned}
\Delta x_{a1} &= \Delta a_1 \bullet a_{2,0} \bullet a_{3,0} \bullet \ldots \bullet a_{n,0} \bullet \frac{\Delta y_x}{\Delta x} \\
\Delta x_{a2} &= a_{1,1} \bullet \Delta a_2 \bullet a_{3,0} \bullet \cdots \bullet a_{n,0} \bullet \frac{\Delta y_x}{\Delta x} \\
&\vdots \\
\Delta x_{an} &= a_{1,1} \bullet a_{2,1} \bullet a_{3,1} \bullet \cdots \bullet \Delta_{a,n} \bullet \frac{\Delta y_x}{\Delta x}
\end{aligned} \tag{2.26}$$

where x is basic ratio, Δx is absolute change in the basic ratio, a is component ratio, Δa is absolute change in the component ratio, Δx_{ai} is influence of the component ratio.

2.4.2 Logarithmic decomposition method

We need just one formula for the impact quantification.

$$\Delta X_{ai} = \frac{\ln I_{ai}}{\ln I_x} \bullet \Delta y_x \tag{2.27}$$

where x is basic ratio, $I_x = \frac{X_1}{X_0}$ is index of change in basic ratio, $I_a = \frac{a_1}{a_0}$ is index of change in component ratio.

2.4.3 Functional decomposition method

Additionally, the impact of particular component ratios is as follows:

$$\begin{aligned}
\Delta x_{ai} &= \frac{1}{R_X} \bullet R_{a1} \bullet (1 + \frac{1}{2} \bullet R_{a2} + \frac{1}{2} \bullet R_{a3} + \frac{1}{3} \bullet R_{a2} \bullet R_{a3}) \bullet \Delta y_x \\
\Delta x_{ai} &= \frac{1}{R_X} \bullet R_{a2} \bullet (1 + \frac{1}{2} \bullet R_{a1} + \frac{1}{2} \bullet R_{a3} + \frac{1}{3} \bullet R_{a1} \bullet R_{a3}) \bullet \Delta y_x \\
\Delta xai &= \frac{1}{R_X} \bullet R_{a3} \bullet (1 + \frac{1}{2} \bullet R_{a1} + \frac{1}{2} \bullet R_{a2} + \frac{1}{3} \bullet R_{a1} \bullet R_{a2}) \bullet \Delta y_x
\end{aligned} \tag{2.28}$$

where x is basic ratio, $R_X = \frac{x_1 - x_0}{x_0}$ is relative change in basic ratio, $R_a = \frac{a_1 - a_0}{a_0}$ is relative change in component ratio

3 Basic Characteristics of the Company

In this chapter, we introduce some information of SINOPEC, the basic introduction, history, business scope culture and so on.

3.1 Basic introduction of SINOPEC

China Petrochemical Corporation (SINOPEC) is founded in1998. Its predecessor is the former China Petrochemical Corporation. SINOPEC is an investment organization authorized by the State and performance subject of state-owned assets. The corporation registered capital of 231.6 billion yuan. The chairman is the legal representative. Headquartered in Beijing.

SINOPEC shall have the right to choose managers of its full subsidiaries, controlled companies and share-holding companies. Meanwhile it have the right to enjoy the asset proceeds and make important resolutions. Corporation manages and supervises state assets according to related laws. In 2000, China Petroleum and Chemical Corporation solely launched by China Petrochemical Corporation was formally established. it issued H-shares and A-shares at overseas and home respectively in October 2000 and August 2001. At present, the company has been listed in New York, Hong Kong, Shanghai and London.

Source: http://www.sinopecgroup.com/group/en/

S: Sustainable

I: International

N: National

O: Oil

P: People

E: Environment

C: Cooperation

This logo like the sun, means SINOPEC is the provider of energy, the blood and power of the national economy. It is ‘the rising sun industry.

3.2 Development process of SINOPEC

On 12 Jul 1983, the inaugural meeting of the head office of Sinopec was held in the Great Hall of the People. In 1984, the country approved the seven major projects construction proposed by the head office of Sinopec, namely ethylene of 390 thousand tons/year in Daqing, Yangtze and Shandong; synthetic ammonia of 30 tons/year and urea of 520 thousand tons /year in Zhenhai, Ningxia, and Urumqi; and the Phase II project of the main factory of Sinopec Shanghai. In 1986, the central government decided to cancel the Board of Directors of Sinopec head office but implement the manager accountability system. In 1990, the first new ethylene cracking furnace (the northern furnace) with an annual yield of 250 thousand tons independently developed and researched by China passed the national identification and acceptance. In 1992, the State Council approved the ethylene reconstruction and extension project of 300 thousand tons/ year proposed by Sinopec Beijing Yanshan. In 1993, China International United Petroleum & Chemicals Co., Ltd. a joint venture of Sinopec head office and Sinochem Group head office, was opened while the first

set of hydrogenation unit with a capacity of 800 thousand tons/year independently developed, designed and produced by China was built in the head office of Sinopec Zhenhai. And Shares H of Sinopec Shanghai was listed in Hong Kong Exchanges and Clearing Limited while Shares A in Shanghai Stock Exchange. In 1995, the trademark "SINOPEC" (Chinese and English together with the pattern of a rising sun) was registered and the service trademark of "Torch" (Sinopec) was registered. IN 1998, the inaugural meetings of China Petrochemical Corporation were held in the Great Hall of the People. On 28 Feb 2000, Petroleum and Chemical Corporation solely launched by China Petrochemical Corporation was formally established. From Oct 9th to Oct 12th, SINOPEC has issued overseas public shares H of 16.78 billion for the first time and raised funds of USD 3.46 billion. On Oct 18th and Oct 19th, Share H of SINOPEC was listed in Hong Kong, New York and London successively. In 2001, SINOPEC issued 2.8 billion Shares A in public in the territory of China and raised funds of 10.8 billion Yuan. On Aug 8th, Shares A of SINOPEC was listed in Shanghai Stock Exchange. In 2004, SINOPEC, Exonmobil, Saudi Aramco and Fujian Refining and Chemical signed an extension and design agreement on an integrated project of Fujian Refining and Chemical at the head office. In 2006, market shareholder structure reform for Shares A was implemented. In 2007, the State Council of China formally approved the project of "Sichun to East Gas Transmission" which has been listed into the major national project of "the Eleventh Five-Year". In 2009, the US magazine of "Fortune" published the List of 2009 Global Top 500 Enterprises where SINOPEC ranked the ninth with an annual sales volume of USD 207.814 billion, becoming an Asian enterprise ranked the highest in such list. On 29 Mar 2010, SINOPEC announced the production startup of the major national project of "the Eleventh Five-Year" of Sichuan to East Gas Transmission. With a total investment of 62.676 billion Yuan, the total length of the main pipeline of "Sichuan to East Gas Transmission" project was over 1700km with a designed annual transmission capacity of 12 billion m^3 of natural gas. On Apr 14th, an earthquake of magnitude 7.1 occurred in Yushu Qinghai. SINOPEC immediately launched the emergency plan and actively devoted to the earthquake relief work at the first time to ensure the oil supply for the disaster area as much as possible. It collected a total disaster relief fund of 15 million Yuan from

polyurethane twice on Apr 15th and Apr 20th. In 2012, SINOPEC signed an agreement with the US Devon Energy Corporation, acquiring one-third equities of the 5 shale oil and gas assets of the Company in the US; signed the joint venture agreement with Saudi Arabian Oil Company and the oil refining factory of Saudi Basic Industry Corporation in Yanbu Riyad and the joint venture agreement with Tianjin polycarbonate project; delivery of acquisition of 30% equities of Galp Brazil was completed in Brazil and Netherlands at the same time; delivery of acquisition of 40% shares of Canada Talisman Energy Ltd. subsidiary in Britain was formally completed. At present, SINOPEC has ranked the second in the List of 2015 Global Top 500 Enterprises published by *Fortune*.

*3.3 The culture of **SINOPEC***

SINOPEC takes "refueling for better life " as its corporate mission, regarding the human longing for a better life as its direction of enterprise development. And it is also committed to providing more advanced technology, better products and more thoughtful service for social development. It adheres to a green, low carbon road of sustainable development and speeds up the construction of industrial structure and mode of production in favor of saving resources and protecting the environment, in order to contribute to the construction of ecological civilization. It strictly adheres to the concept of cooperation and win-win development. In the development of the company at the same time, it brings well-being for all interested parties.

SINOPEC takes "building a satisfying, world class energy chemical companies" as its corporate vision.

It is committed to become an enterprise which people are satisfied. It more stresses the development of quality and efficiency, technological progress, green low carbon and people oriented philosophy, to provide first-class products, technologies and services, and to show first class socially responsible images. In strives to become a highly responsible, highly respected great enterprise to enhance satisfaction of employees, customers, shareholders, the public, and the people

of the country (or region).

In order to become a world's leading enterprises. It not only needs first class size, quality and efficiency, it also needs first-class enterprise management and social image. Beside, first-class market, international competitiveness are also needed. Against the world first-class enterprise standards and through the unremitting efforts, it has become a world class advanced enterprise in its technology, talent and brand with standard management, efficient administration, advanced culture, high degree of marketization, international management ability.

In order to become a green, efficient energy and chemical industry company, it takes energy, chemical industry as the main direction, and does a good job in strategic layout and business structure optimization. In the development of traditional business at the same time, it continues to exploit and utilize rock gas, biomass energy and other new energy sources. It also does a research on development of new chemical materials to promote the clean utilization of coal resources. All these have made it a green, efficient energy and chemical industry enterprises.

The three aspects above are an organic unity which reflects the requirements of the development of enterprises in the context of economic globalization, the essential characteristics of international enterprises and the development trend of energy industry. It is the conscious pursuit of SINOPEC reform and development.

3.4 Summary and outlook

In 2014, SINOPEC's annual capital expenditure is 1,546 billion RMB, 802 billion RMB of which is used to speed up the construction of Fuling shale gas field, the promotion the oil and gas development project, LNG and the construction of oil and gas pipeline. 28 billion RMB of which is used in the project construction of oil quality upgrading and expansion project of oil refining. 27 billion RMB of which is used in the construction of refueling (gas) station and logistics network, the improvement of the non-oil business facilities. 159 billion RMB of which is used in the

construction of key projects and the adjustment of raw materials structure. 36 billion RMB of which is used in the construction of scientific research equipment and information technology projects.

In 2015, SINOPEC will continue to develop quality and efficiency as its central task, increase investment optimization efforts, strengthen the control of fuel, power and other operating costs, improve the operational efficiency, intensify the reform, flattening management level, improve labor efficiency and reduce administrative costs. It will continue to control the inventory occupation and capital expenditure, make full use of domestic and foreign capital channels and reduce the cost of financing. It also should response to crude oil market fluctuations more actively, and reduce the cost of crude oil.

4 Evaluation of Financial Situation of the Company

In this part, we will analyze financial position of the company on the basis of financial statements data for period 2010-2014. First, we will use common-size analysis, i.e. vertical and horizontal for the financial statements. And then we calculate a series of financial ratios whose main purpose is to know about the operating efficiency of the company. Finally, method of gradual changes will be applied for the DuPont Analysis of the company's finances.

4.1 Common-size analysis

In this part, we will separate the common-size analysis into two parts which are vertical common-size analysis and horizontal common-size analysis.

4.1.1 Vertical common-size analysis

First, this part will calculate the annual proportion of current assets and non-current assets to total assets from 2010 to 2014, see table 4.1.

Table 4.1 Vertical common-size analysis of balance sheet (total assets)

	2010	2011	2012	2013	2014
Total current assets	25.31%	28.99%	27.64%	26.97%	24.81%
Total non-current assets	74.69%	71.01%	72.36%	73.03%	75.19%
Total assets	100%	100%	100%	100%	100%

From table 4.1, we can see that in 2011-2014, there is a proportional change of total non-current assets and total current assets to total assets, basically stable between 24% - 28%. The highest proportion of current assets appeared in 2011, which is 28.99%, the lowest point occurred in 2014, which is 24.81%. From 2011, The company's liquidity has decreased, resulted by large

investment of this company.

The ratio of current assets to total assets fluctuated with first increased and then decreased. From 2011, the proportion of non-current assets gradually increased, reaching the highest point of 75.19 percent in 2014.

Chart 4. 1 Vertical common-size analysis of balance sheet (Total assets)

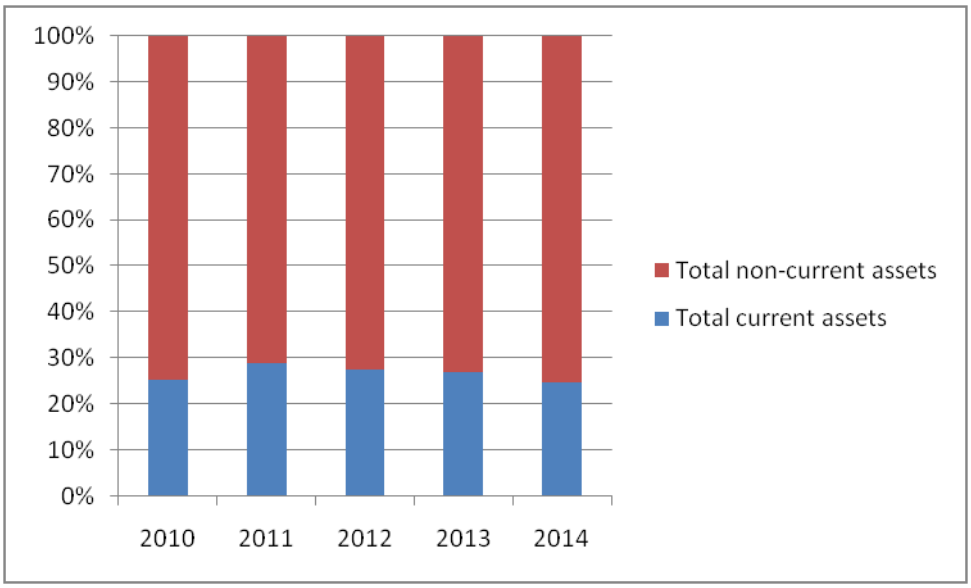


Chart 4.1 clearly shows us the non-current assets and current assets ratio structure in total assets. Obviously, the non-current assets of the company hold a larger proportion, which is determined by the enterprise property. Fixed assets of the company spreads all over the country, including large factories, mechanical equipment, oil field, coal mine etc., which are used for developing energy and producing chemical products, thus its non-current assets holds a large proportion.

The following Table 4.2 shows the vertical common-size analysis of total non-current assets.

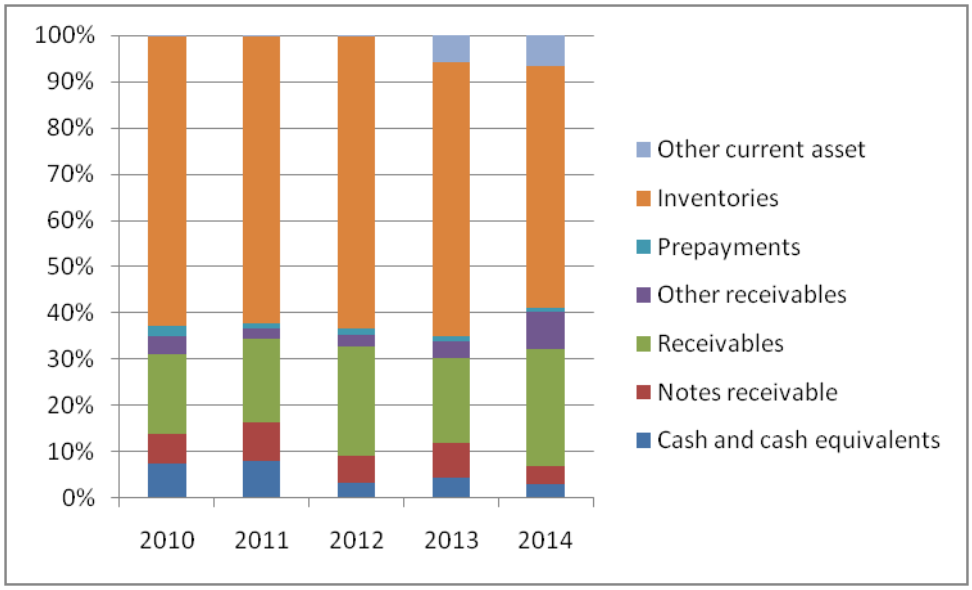
Table 4.2 Vertical common-size analysis of balance sheet (total current assets)

	2010	2011	2012	2013	2014
Cash and cash equivalents	7.27%	7.69%	3.15%	4.05%	2.80%
Notes receivable	6.39%	8.54%	5.81%	7.71%	3.88%
Receivables	17.28%	17.93%	23.61%	18.36%	25.22%
Other receivables	3.96%	2.25%	2.55%	3.53%	8.12%
Prepayments	2.10%	1.25%	1.27%	1.13%	1.05%
Inventories	62.76%	62.10%	63.31%	59.49%	52.26%
Other current asset	0.24%	0.26%	0.29%	5.73%	6.66%
Total current assets	100.00%	100.00%	100.00%	100.00%	100.00%

As it can be seen from the above table 4.2, the proportion of cash and cash equivalents to total assets of the company there are some changes with fluctuation. Notes receivable absolute and relative changes of the company. Also emerged fluctuations. Inventories volatility of the company changes small, but has also undergone a decline in 2014. Inventory to total assets ratio was 52.26% bottoming out.

In 2014, the decline of inventories and notes receivable led to a decrease of current assets. However, subsidiary trade receivables increase the company's receivables significantly. In summary, the company should be considered to reduce the proportion of receivables. This will not only prevent the occurrence of bad debts, but also to make more cash transform to the current cash flow, thereby improving the quality of profits.

Chart 4.2 Vertical common-size analysis of balance sheet (total current assets)



From chart 4.2 we can see that the inventories hold the largest proportion among the current assets of the company which means that the company is bearing a large inventory cost. The performance of the company is susceptible to the global economic situation, when the performance is poor and the enterprise turnover is tough, the inventory will cause some pressure. For example, back in 2014, the decrease of international crude oil price made the company suffer from high crude oil inventory costs.

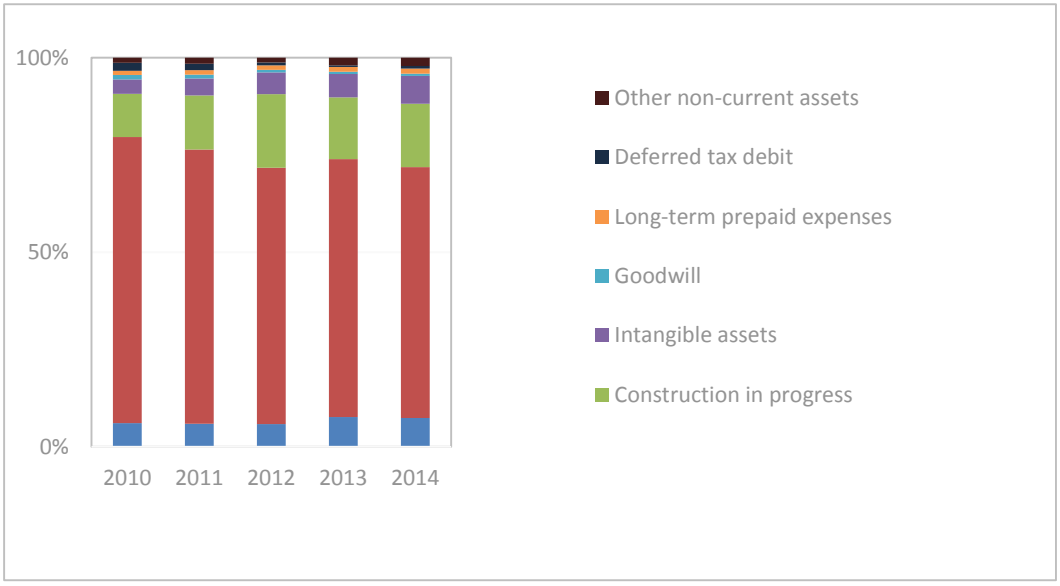
Then, total non-current assets as the baseline, result of vertical common-size analysis of total non-current assets can be seen in table 4.3.

Table 4.3 Vertical common-size analysis of balance sheet (total non-current assets)

	2010	2011	2012	2013	2014
Investments accounted for using the equity method	6.12%	5.91%	5.82%	7.63%	7.39%
Property, plant and equipment	73.47%	70.52%	65.90%	66.30%	64.47%
Construction in progress	11.13%	13.87%	18.91%	15.91%	16.28%
Intangible assets	3.73%	4.34%	5.58%	5.97%	7.21%
Goodwill	1.13%	1.02%	0.70%	0.62%	0.58%
Long-term prepaid expenses	1.03%	1.13%	1.15%	1.18%	1.30%
Deferred tax debit	2.12%	1.67%	0.71%	0.41%	0.64%
Other non-current assets	1.28%	1.52%	1.24%	1.98%	2.14%
Total non-current assets	100%	100%	100%	100%	100%

By observing changes in the proportion of each of the assets to total assets, it can be seen in the investment focus of the business. As it can be seen, investments accounted for using the equity method grow from 2011, reaching a peak in 2014. Intangible assets are growing year by year.

Chart 4.3 Vertical common-size analysis of balance sheet (total non-current assets)



From chart 4.3, we can see the chart verified the idea we brought out when analyzing the chart 4.1, the property, plant and equipment hold large proportions in non-current assets.

Meanwhile, we can see that the ratio of construction in process is rising year by year, which results from company's investing in many projects. Such as the Fuling shale gas field project, the first-stage productivity construction project which was planned to be continued in 2015, the Guangxi liquefied natural gas (LNG) project, which was planned to be completed and put into operation in 2015, and the Tianjin liquefied natural gas (LNG) project planned to be completed in 2016 etc.

The chart also shows that the intangible assets of the company is increasing, which means that in the past five years, SINOPEC's development accorded with the company's development concepts, i.e. the technological innovation we put forward in chapter three. The company has been continuously developing high and new technology, trying to develop and effectively use the renewable energy, such as shale gas, bio-energy, etc., developing new chemical industry materials and promoting clean energy utilization, devoting itself to becoming an environmentally effective energy and chemical enterprise.

The development of know-how is a key factor for the increasing of the company's intangible assets.

Next, this part took total current liabilities as the baseline, result of vertical common-size analysis of total current liabilities can be seen on table 4.4.

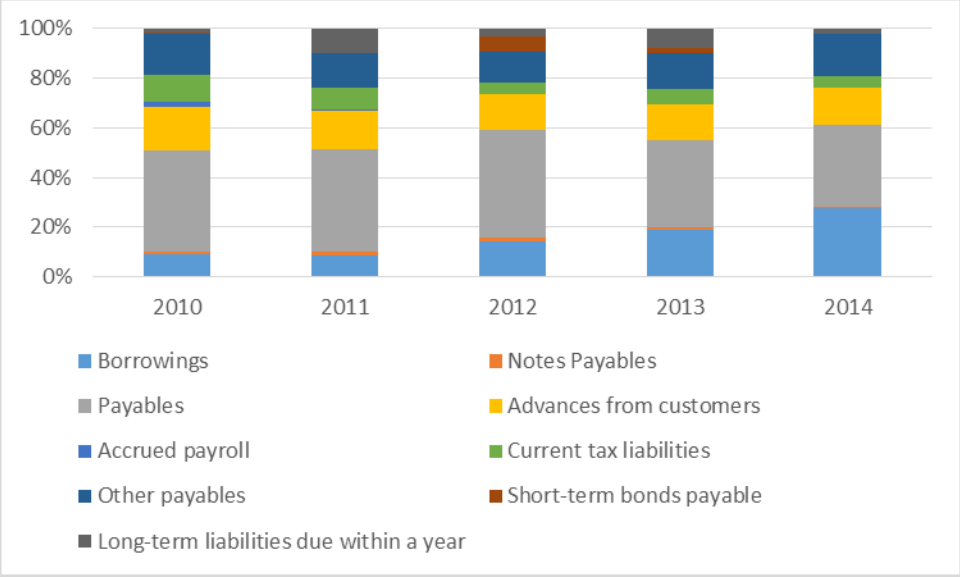
Table 4.4 Vertical common-size analysis of balance sheet (total Current liabilities)

	2010	2011	2012	2013	2014
Borrowings	9%	8.62%	14.24%	18.91%	27.59%
Notes Payables	1.17%	1.38%	1.35%	0.79%	0.76%
Payables	40.70%	41.25%	43.73%	35.45%	32.83%
Advances from customers	17.60%	15.54%	14.05%	14.18%	14.88%
Accrued payroll	2.29%	0.42%	0.37%	0.14%	0.14%
Current tax liabilities	10.38%	9.23%	4.46%	6.28%	4.75%
Other payables	16.85%	13.44%	12.52%	14.50%	17.10%
Short-term bonds payable	0.31%	-	6.08%	1.75%	-

Long-term liabilities due within a year	1.70%	10.11%	3.19%	8.00%	1.97%
Total Current liabilities	100%	100.00%	100.00%	100.00%	100.00%

As it can be seen from the table 4.4, the increasing of the company's total current liabilities mainly caused by the increasing of borrowings. In current liabilities, the portion of borrowings and payables are large. Those two shares above 50% of Total current liabilities. The value of borrowing increased 166,688 million yuan in the end of 2014 from 29,298 million yuan in the end of 2010, it mainly caused by the debt structure of this company has adjusted, which increased low-cost short-term dollar loans. Payables showing a change that first growth then decreased. As the company expanded business scale, crude oil and other raw material prices and purchases increased, payables increase to 43.73%. Subsequently, the company adjusted the debt structure, which increases the proportion of borrowings, thereby reducing the proportion payables to 32.83%, which indicates that it is a relatively risky financial structure.

Chart 4.4 Vertical common-size analysis of balance sheet (total Current liabilities)



We can see from chart 4.4 that there is an obvious increasing rate in the loan ratio, that's because the company adjusted its debt structure, which increased the low cost short-term dollar loans. The loans increase and more capitals come from debtors, which to an extent, reflects the

good reputation and low financing cost pressure of a company. Up to 2014, the asset-liability ratio of the company was 55.52%, 0.47% higher that the former year. At present, the rating of creditworthiness of the company continue to be Aa3 by Moody, while the rating by Standard Poor increased from A+ to AA-. The long-term issue credit rating continues to be AAA.

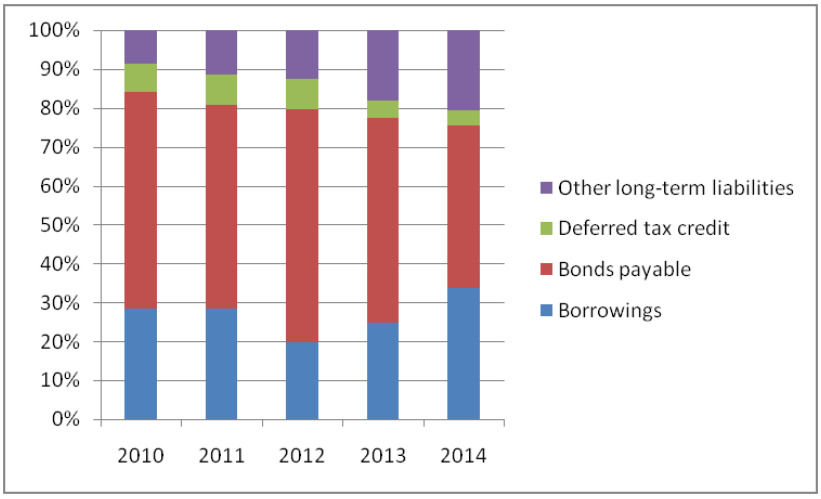
Then, this part took total non-liabilities as the baseline, result of vertical common-size analysis of total current liabilities can be seen at table 4.5.

Table 4.5 Vertical common-size analysis of balance sheet (total non-current liabilities)

	2010	2011	2012	2013	2014
Borrowings	28.44%	28.37%	19.78%	24.73%	33.71%
Bonds payable	55.62%	52.30%	59.86%	52.78%	41.75%
Deferred tax credit	7.25%	7.93%	7.88%	4.25%	3.91%
Other long-term liabilities	8.69%	11.40%	12.48%	18.24%	20.63%
Total Non-current liabilities	100.00%	100.00%	100.00%	100.00%	100.00%

As it can be seen from the table 4.5, total non-current liabilities of the company. Changes with fluctuation. The proportions of borrowings and bonds payable are relatively large, especially bonds payable. In 2014, due to the changes in the fair value of the derivative component, bonds payable occurred significantly reduced. The fair value of the derivative component of the convertible bonds is calculated by the Binomial model. From December 31, 2013 to December 31, 2014, changes in the fair value of the derivative component resulting in a 161,300 million yuan loss. In contrast, in the same period, borrowings increased, which makes up for structural changes in financial by the loss of bonds payable to the enterprise.

Chart 4.5 Vertical common-size analysis of balance sheet (total non-current liabilities)



From chart 4.5 we can see that the bonds payable ratio is the largest one. One of the reason for this is that the company issued the A share convertible bonds of RMB 23 billion on Feb. 23rd, 2011, and the time limit is six years. So in the following few years, the company's been paying the interests of the bonds to creditors.

Among these, the bonds payable ratio in 2012 is higher than other years, and at the end of 2012, the company had 203.6 billion long-term debts, RMB 12.1 billion more than the former year. This mainly attributes to the issuance of corporate bonds, and by switching those to the non-current due within one year, the long-term debts and payables increased RMB 7.7 billion.

Next, this part took total liabilities and equity as the baseline, result of vertical common-size analysis of total current liabilities can be seen as table 4.6.

Table 4.6 Vertical common-size analysis of balance sheet (total owners' equity)

	2010	2011	2012	2013	2014
Owners' Equity	8.80%	7.67%	6.96%	8.43%	8.15%
Capital surplus	2.99%	2.62%	2.45%	2.67%	3.36%
Special reserves	0.13%	0.28%	0.28%	0.11%	0.03%
Surplus reserve	14.38%	15.77%	14.80%	13.76%	13.34%
Undistributed profit	16.56%	15.78%	16.79%	16.24%	16.59%

Difference on translation of foreign currency financial statements	-0.12%	-0.14%	-0.13%	0.00%	0.00%
Total equity attributable to equity holders of the Company	42.74%	41.98%	41.16%	41.24%	40.96%
Minority interest	3.20%	3.11%	2.98%	3.83%	3.62%
Other comprehensive income	0.00%	0.00%	0.00%	0.03%	-0.50%
Total owners' equity	45.94%	45.09%	44.14%	45.07%	44.59%
Total liabilities and equity	100%	100%	100%	100%	100%

As it can be seen from the table 4.6, the company's total shareholders 'equity growing year by year. Since the transformation of debt to shareholders makes upgrading interests of minority, from December 31, 2012 to December 31, 2013, total equity attributable to equity holders of the company equity accounted decline in the proportion. 2012--2014 years, it has a total of 93,001,030 convertible bonds into SINOPEC A shares, cumulative convertible 1,832,955,041 shares. February 14, 2013 the company. Issue of H shares 2,845,234,000 shares. According to relevant regulations, the company required safety production fee from special reserves, the accrual basis is part of the sales revenue refining and chemical products and production of crude oil and natural gas. Therefore, special reserves have change due to the provision and production safety costs.

Then, this part took revenue as baseline, result of vertical common-size analysis of income statement can be seen at table 4.7.

Table 4.7 Vertical common-size analysis of income statement

	2010	2011	2012	2013	2014
Revenue	100%	100%	100%	100%	100%
-：Cost	80.34%	83.54%	85.15%	85.30%	85.96%
Business taxes and surcharges	8.22%	7.58%	6.77%	6.62%	6.77%
Selling expenses	1.67%	1.53%	1.45%	1.54%	1.64%
General and administrative expenses	3.02%	2.52%	2.35%	2.55%	2.49%
Financial expense;	0.36%	0.26%	0.35%	0.22%	0.34%
Exploration expenses	0.57%	0.53%	0.56%	0.44%	0.39%
Impairment losses	0.81%	0.23%	0.28%	0.14%	0.24%
+：Changes in fair value gains	-0.01%	0.06%	0.01%	0.08%	-0.15%

and losses					
Investment income	0.30%	0.17%	0.06%	0.09%	0.29%
Operating profit	5.30%	4.03%	3.16%	3.35%	2.32%
+: Non-operating income	0.11%	0.14%	0.16%	0.12%	0.17%
-: Non-operating expenses	0.07%	0.07%	0.09%	0.10%	0.13%
Profit before income tax	5.34%	4.10%	3.23%	3.37%	2.35%
-: Income tax expense	1.32%	1.03%	0.85%	0.89%	0.62%
Net profit	4.02%	3.07%	2.38%	2.48%	1.73%

As it can be seen from the table 4.7, in 2010-2014, the operating income of the company increased stably, so as operating costs. In the perspective of cost per revenue, the gross margin of the company has a decline trend. Selling expenses is large in the research period, but its portion on revenue has been fluxing. In 2010-2013, general and administrative expenses has been decreasing with portion on revenue, which means cost management capabilities is promoting. Financial expenses fluctuated, associated with structural changes in the company's debt. It also resulted with exchange gains and losses of the RMB exchange rate changes. Operating profit of Sinopec showed a gradual downward trend overall, compared with 2012, operating profit in 2013 performed well, but fall in 2014. It is related to operating costs' constantly rising, the company needs to further enhance cost management capabilities.

4.1.2 Horizontal common-size analysis

Following table 4.8 shows the horizontal common-size analysis of total current assets, this part took year 2010 as base year to compare.

Table 4.8 Horizontal common-size analysis of balance sheet (total current assets)

	2010	2011	2012	2013	2014
Cash and cash equivalents	100%	139%	60%	83%	56%
Notes receivable	100%	175%	126%	180%	88%
Receivables	100%	136%	189%	159%	211%
Other receivables	100%	74%	89%	133%	296%
Prepayments	100%	78%	83%	80%	72%

Inventories	100%	130%	139%	142%	120%
Other current asset	100%	141%	170%	3600%	4040%
Total current assets	100%	131%	138%	150%	144%
Total assets	100%	114.68%	126.58%	140.34%	147.29%

From table 4.8, we can see that in 2011-2014, the scale of the company's assets showing an overall rising trend. In detail, total assets increased to 1,382,916 million in 2014 from 985,389 million yuan in the end of 2010, growth rate is 47.29 percent. Total current assets increased to 373,010 million yuan in 2013 from 249,450 million yuan in the end of 2010, growth rate is 49.53%. But in 2014, current assets have decreased greatly.

As it can be seen from the table 4.8, the proportion of cash and cash equivalents to total assets of the company changes with fluctuation. In 2011, in response to market tighter liquidity conditions and centralized payment before the Spring Festival, the company prepared some of the cash and cash equivalents in advance, which resulted in cash and cash equivalents growth. In 2012, the company strengthen the centralized management of funds, stock funds compression, which resulted in a reduction of cash and cash equivalents. In 2013, capital stock of the company at the end of the year is larger than the beginning of the year, which also led to the growth of cash and cash equivalents. In 2014, the company spent cash and cash equivalents to compensate the shortfall, which led to a decline in cash and cash equivalents.

Notes receivable absolute and relative changes of the company also emerged fluctuations. From 2011 to 2013, the company expanded business scale and reduced the discount, which led to notes receivable growth. In 2014, prices of chemical products fell, Chemical Sales Company's accounts receivable in the settlement of bills reduced, endorsed or discounted bills increased. Therefore, notes receivable decreased significantly.

Inventories volatility of the company changes small, but has also undergone a decline in 2014. In 2014, the decline of inventories and notes receivable led to a decrease of current assets. However, subsidiary trade receivables increase the company's receivables significantly.

Following table 4.9 shows the horizontal common-size analysis of total non-current assets, this part took year 2010 as base year to compare.

Table 4.9 Horizontal common-size analysis of balance sheet (total non-current assets)

	2010	2011	2012	2013	2014
Investments accounted for using the equity method	100%	105.38%	115.60%	167.24%	178.95%
Property, plant and equipment	100%	107.45%	120.25%	131.72%	139.80%
Intangible assets	100%	126.98%	181.61%	219.62%	286.74%
Goodwill	100%	98.96%	75.40%	75.38%	75.69%
Long-term prepaid expenses	100%	120.05%	135.53%	158.21%	187.28%
Deferred tax debit	100%	86.01%	97.12%	26.58%	44.80%
Other non-current assets	100%	708.28%	639.61%	1093.28%	1519.51%
Total non-current assets	100%	109.04%	122.64%	137.23%	148.28%
Total assets	100%	114.68%	126.58%	140.34%	147.29%

From table 4.9, we can see that in 2011-2014, Total non-current assets increased to 1,009,906 million yuan in 2014 from 735,939 million yuan in the end of 2010, growth rate is 48.28%. There is a steady increase in the size of the company's assets. Investments accounted for using the equity method has a fast growth in 2014 than in 2010, which has an increase of 78.95%. Growth rate of other non-current assets and Intangible assets is largest. Due to the company's planned investment and the implementation of the new land use rights, the company's total non-current assets has a constant growth.

Following table 4.10 shows the horizontal common-size analysis of income statement, this part took year 2010 as base year to compare.

Table 4.10 Horizontal common-size analysis of income statement

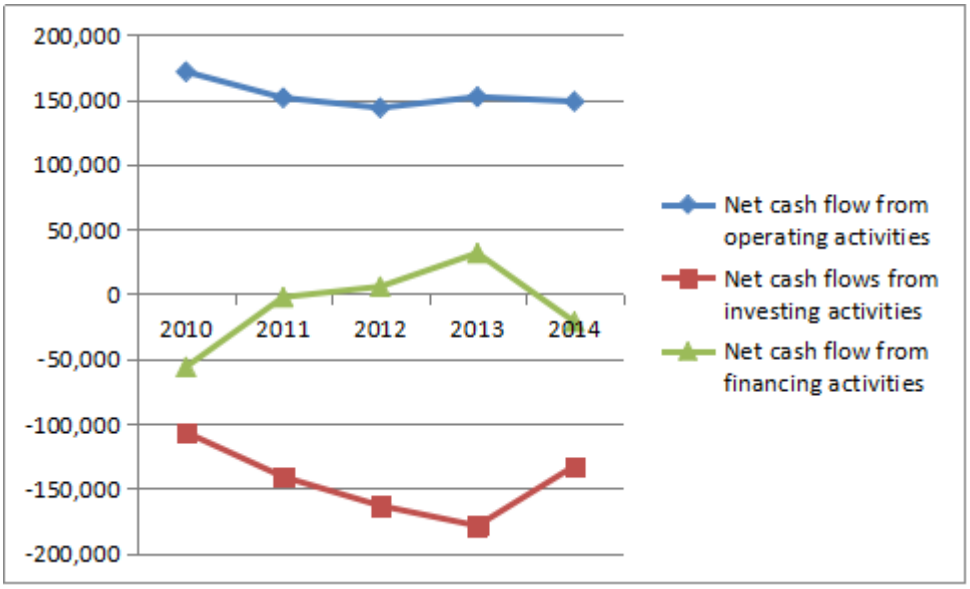
	2010	2011	2012	2013	2014
Revenue	100%	130.97%	145.62%	150.55%	147.71%
Cost	100%	136.18%	154.33%	159.85%	158.02%
Business taxes and surcharges	100%	120.84%	119.91%	121.30%	121.64%
Selling expenses	100%	120.07%	126.01%	138.70%	144.69%

General and administrative expenses	100%	109.19%	113.53%	127.34%	122.03%
Financial expense;	100%	95.57%	143.41%	91.63%	140.47%
Exploration expenses	100%	121.78%	141.79%	114.77%	100.13%
Impairment losses	100%	37.62%	51.19%	26.18%	44.28%
Changes in fair value gains and losses	100%	-794.97%	-115.08%	-1210.61%	2318.99%
Investment income	100%	73.81%	27.16%	44.26%	143.48%
Operating profit	100%	99.62%	86.75%	95.17%	64.61%
Non-operating income	100%	161.81%	216.94%	165.13%	223.43%
Non-operating expenses	100%	135.65%	186.58%	230.27%	289.39%
Profit before income tax	100%	100.45%	88.19%	94.91%	65.06%
Income tax expense	100%	101.73%	93.53%	101.07%	69.35%
Net profit	100%	100.03%	86.42%	92.89%	63.65%

As it can be seen from the table 4.10, operating profit of the company is declining year by year, profit before income tax and net profit also generally declining trend. Compared with 2012, the year 2013 has improved in profit, followed by 2014 profit before income tax dropped to 66,481 million yuan, and net profit dropped to 48910 million yuan. Moreover, operating income and operating expenses of the company are rising year by year, their percentage of revenue also increased, which shows a strong business-to-operating income and expense management capabilities.

Revenue of the company showed a gradual upward trend overall, compared with 2010, operating profit in 2013 performed well, but fall in 2014. Cost of the company has the same trend. However, growth rate is greater than the growth rate of income, which is the main reason for decline in volatility profit Net. It shows that companies need to improve their cost management capabilities.

Chart 4.6 Net Cash Flow



Net cash flow from operating activities respectively is 171,262 million yuan, 151,181 million yuan, 143,462 million yuan, 151,893 million yuan, and 148,347 million yuan. It has an overall downward trend, a slight increase in 2013 reflects the good operating condition in 2013. Cash inflow from operating activities increased compared with last year. Cash flows from operating activities are growing, including increased procurement costs, improve wages and other, so, the company needs to consider reducing the cost. However, net cash flows from investing activities decline in 2010-2014, though rebound in 2014. This is attributed to the company reduced the scale of investment in 2014, while in the previous years, the company has continued foreign investment. In the situation of operation downturn, the company should appropriately reduce investment scope and scale. Net cash flow from financing activities has increased in 2010-2013, followed by a drop in 2014, which is due to the down substantially of cash received from investments in 2014.

4.2 Financial ratio analysis

In this part we will separate the financial ratio analysis into four parts which are activity ratio, leverage ratio, profitability ratio and liquidity ratio. All these ratios are based on the company's financial statements for 2010-2014.

4.2.1 Profitability ratios

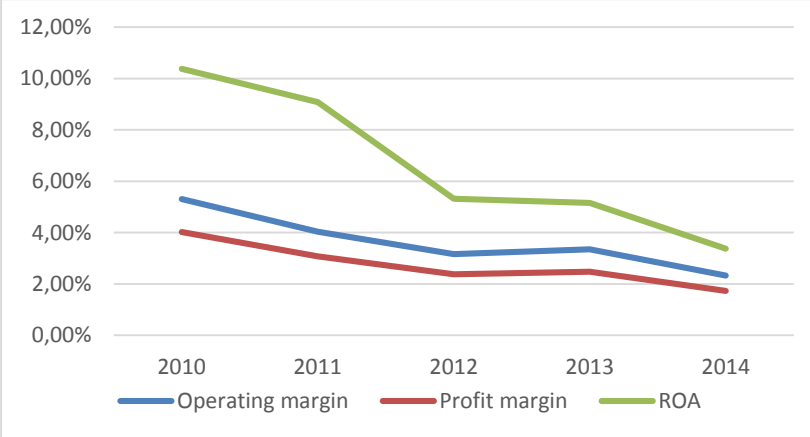
According to formulas (2.17), (2.18) and (2.19), we calculate operating margin, profit margin and ROA. The results shows in the following table.

Table 4.11 Operating margin & Profit margin & ROA

	2010	2011	2012	2013	2014
Operating margin	5.30%	4.03%	3.16%	3.35%	2.32%
Profit margin	4.02%	3.07%	2.38%	2.48%	1.73%
ROA	10.37%	9.08%	5.32%	5.16%	3.37%

According table 4 .11 we can make chart 4.7.

Chart 4.7 Operating margin & Profit margin & ROA



From the table 4.11 and chart 4.7, we can see that the three indicators that reflect the company's profitability decline as a whole. This is the result of the impact of global economy. For example, in 2012, the world economic growth slowed down, U.S. economic recovery was quite slow, European debt crisis got a widespread outbreak, China's economy had a slow pace of growth and the market demand was weak. In 2014, with the falling of international crude oil price, the price of domestic refined petroleum products was consecutively reduced for 11 times.

But we can see that, from 2012 to 2013, the fluctuations of these three indicators were not big and they were even on the rise. This was attributed to a relatively stable market environment and the company's scientific management. In 2013, the turnover of crude oil for export, natural gas and other upstream products was 60.8 billion yuan, with a year-on-year growth of 13.2%. This was mainly attributed to the growth of sales of crude oil as well as the increase of sales and price of natural gas. In 2013, the proceeds of foreign sales of oil products from oil refining division and sales & distribution division of the company reached 1.6805 trillion yuan, with a year-on-year growth of 2% and accounting for 59.3% of the company's turnover. This was mainly attributed to the growth of sales of refined petroleum products. The sales income of gasoline, diesel and kerosene was 1.3328 trillion yuan, with a year-on-year growth of 2.4% and accounting for 79.3% of sales income of oil products. The sales income of other refined oil products was 347.7 billion yuan, with a year-on-year growth of 0.8% and accounting for 20.7% of sales of oil products. In addition, the foreign sales income of the company's chemical products was 374.1 billion yuan, with a year-on-year growth of 5.0% and accounting for 13.2% of the company's turnover. This was attributed to the growth of sales of chemical products.

4.2.2 Liquidity ratios

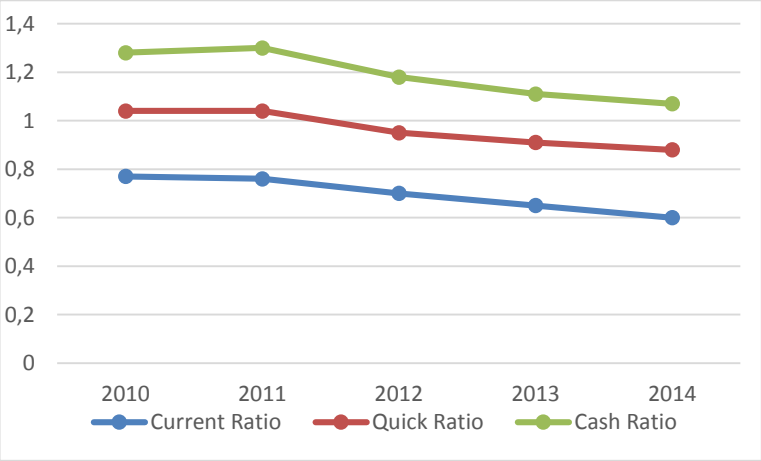
Current ratio, quick ratio and cash ratio are the main indicators to measure of a company's liquidity. We calculate the ratios according to the following formulas (2.7), (2.8) and (2.9).The results shows in the following table.

Table 4.12 Current Ratio & Quick Ratio & Cash Ratio

	2010	2011	2012	2013	2014
Current Ratio	0.77	0.76	0.70	0.65	0.60
Quick Ratio	0.27	0.28	0.25	0.26	0.28
Cash Ratio	0.24	0.26	0.23	0.20	0.19

According table 4.12 we can make chart 4.8.

Chart 4.8 Current Ratio & Quick Ratio & Cash Ratio



From the table 4.12, we can see that the values of the three indicators that reflect Liquidity ratios were all less than 1, which meant that the company's liquidity was weak. This was determined by the corporate nature of the company. The main business scope of company included the exploration, exploitation, transportation and storage of oil and natural gas. That is to say, the company had a great number of large-scale equipment, factories and land and the allocation of fixed assets is relatively higher. Therefore, its liquidity was relatively small.

The company's liquidity was also affected by company size. SINOPEC was one of the largest integrated energy & chemical companies in China and it owned higher social trust degree. So the financing cost of the company was lower and it could keep relatively weak liquidity.

Cash ratio best reflects the ability of companies to pay direct current liabilities. Generally speaking, the cash ratio above 0.2 is appropriate. However, if the ratio is too high, it means that the enterprise failed to rational use of current liabilities, thus leading to low profitability of the cash asset class. As can be seen, in 2010--2012 years, the cash ratio of the company is above 0.2, began to decline from 2013, and even fell below the 20% threshold in 2014. It also shows that the liquidity is poor.

4.2.3 Solvency ratios

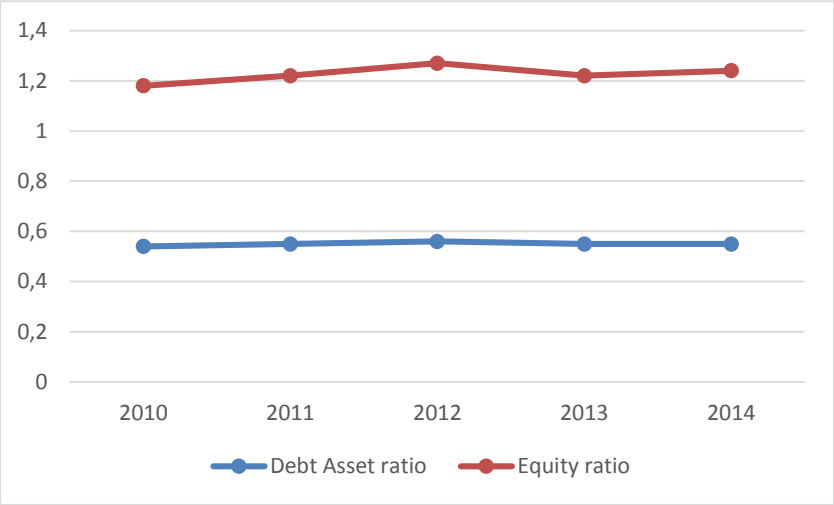
Now, companies are usually to expand the scale of enterprises through debt financing. Solvency will directly affect investors, creditors and others. According to formulas (2.14) and (2.15) we calculate debt asset ratio and equity ratio. The results are shows in the following table.

Table 4.13 Debt Asset ratio & equity ratio

	2010	2011	2012	2013	2014
Debt ratio	0.54	0.55	0.56	0.55	0.55
Debt-to-equity ratio	1.18	1.22	1.27	1.22	1.24

According table 4.13 we can make chart 4.9.

Chart 4.9 Debt Asset ratio & equity ratio



From table4.13 and chart 4.9, we can see that debt ratio of the company basically fluctuated around 0.55. This indicated that 55% capital of the company came from debt and the other 45% capital came from shareholders' equity. In general, this was a relatively stable structure, but the investment of creditors was a bit more than that of shareholders. The value of debt-to-equity ratio from 2010 to 2014 was greater than 1, which also embodied this. This was because that on February 23, 2011, the company issued 23 billion RMB of A-share convertible corporate bond (code: 110015). Its convertible face value and issuing price were both 100 yuan/piece, with deadline for 6 years. The coupon rate during each of these six years was planned to respectively be 0.5%, 0.7%, 1.0%, 1.3%, 1.8% and 2.0% and the initial share transfer price was 9.73 yuan/share. On March 7, 2011, it was traded on Shanghai Stock Exchange (SSE). As of December 31, 2014, the convertible bond of the company accumulatively transferred 1,832,955,041 shares and the balance of bond was RMB 13,699,897,000 yuan. In other words, the balance of the bond took a larger proportion.

4.2.4 Activity ratio

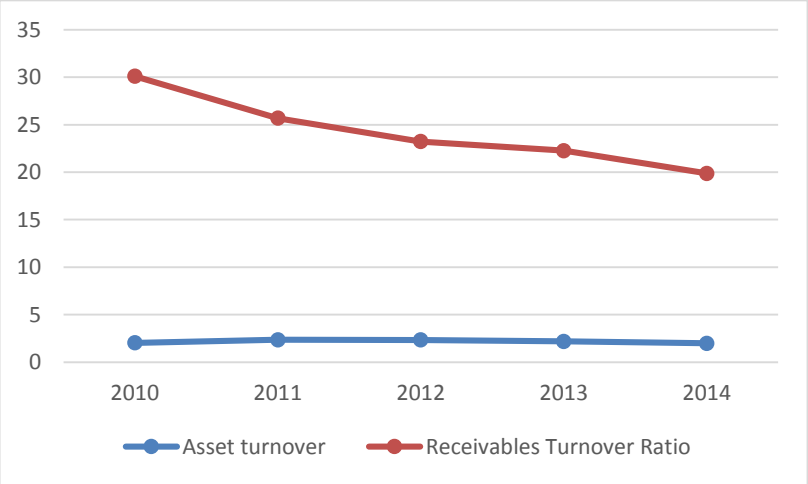
According to formulas (2.10) and (2.13) we calculate asset turnover and receivables turnover Ratio. The results are shows in the following table.

Table 4.14 Asset turnover & Receivables Turnover Ratio

	2010	2011	2012	2013	2014
Asset turnover	2.04	2.37	2.34	2.19	1.99
Receivables Turnover Ratio	30.10	25.69	23.22	22.27	19.87

According table 4.14 we can make chart 4.10.

Chart 4.10 Asset turnover & Receivables Turnover Ratio



The company's asset turnover fluctuate between 1.99 to 2.37, indicating it's less than three times turnover of assets annual, the number of asset turnover is low. However, the receivables turnover ratio exhibit is declining, which is a good sign. This shows this company has focus on the importance of receivables, liquidity enhanced.

This meant that under the severe international political and economic market environment, in order to promote the sales of product. The company eased credit management policy and encouraged more deals. For instance, in 2014, the growth rate of refined petroleum market demand slowed down and especially diesel demand was in downturn. The company flexibly adjusted marketing strategies, constantly optimized market sales structure, increased the sales intensity of high-grade gasoline and jet fuel and enlarged business volume, it gave full play to advantages in network and brand, vigorously enhanced the integrated service level of gas stations, expanded the scale of retail, actively developed non-oil business, launched online business hall for refueling card nationwide, popularized self-help terminal application and equipment, improved customer experience and made tremendous efforts to provide one-stop service for customers.

4.3 Pyramidal decomposition (Dupont analysis)

In this part, we will use DuPont financial analysis theory mentioned in the second chapter to analyze the change tendency of ROE of the company and the reasons behind it during 2010-2014. We will also apply gradual change to calculate the influence degree of net profit margin, asset turnover and financial leverage on ROE in each period. We will judge the company can achieve the purpose of improving ROE by increasing which indicator and will expound the concrete measures of the company.

The following table shows the changes of ROE from 2010 to 2014.

Table 4.15 Data of ROE

	2010	2011	2012	2013	2014
EAT/Revenue	0.053	0.040	0.032	0.033	0.023
Revenue/Assets	1.942	2.217	2.249	2.083	1.947
Assets/Equity	2.177	2.218	2.249	2.219	2.243

Through table 4.15, we can see that net profit margin is generally on the decline within these five years because from 2010 to 2011, the international political and economic environment was

complicated, international crude oil price became volatile after soaring, domestic economic pressure increased and the control on refined petroleum products was tightened, all of which posed huge challenges to the company. In 2012, the world economic growth slowed down, U.S. economic recovery was quite slow, European debt crisis got a widespread outbreak, China's economy had a slow pace of growth and the market demand was weak. From 2012 to 2013, the market environment was relatively stable, so the Net profit margin in these two years has few fluctuations. In 2014, as a result of the world economic recession, the international crude oil price fell sharply sideways in the second half of the year and encountered a tumbling drop in the fourth quarter. With the falling of international crude oil price, the price of domestic refined petroleum products was consecutively reduced for 11 times.

We can also see that, from 2010 to 2012, total asset turnover presented a rising trend, which indicates that the enterprise management was scientific and the asset utilization ratio was continuously improved. However, in 2013-2014, the total asset turnover suddenly fell. What's the matter? At 3 a.m. on November 22, 2013, at the intersection of Qinhuangdao Road and Zhaitangdao Road in Huangdao District, Qingdao City, Shandong Province, the oil transmission pipeline of Weifang branch of SINOPEC Oil Transmission & Oil Storage Company ruptured. After the accident was discovered, the oil transmission was halted nearly at 3:15 a.m. About 1,000 square meters of surface of Zhaitangdao Road was polluted by crude oil, part of crude oil entered Jiaozhou Bay along the rainwater pipeline and the oil area of sea surface was about 3,000 square meters. Huangdao District immediately organized personnel to erect two oil containment booms on the sea surface. In the process of disposal, at 10'clock in the morning on the same day, deflagration occurred at the intersection of Yanhaihe Road and Zhaitangdao Road in Huangdao District and deflagration happened in the mouth of oil-polluted sea surface at the same time. The extraordinarily serious accident of leakage and blast of Shandong Qingdao "11.22" SINOPEC Donghuang oil transmission pipeline was identified as a liability accident. In this accident, a total of 63 people were killed and 156 people were injured. The direct economic loss reached 750 million yuan.

The greater the value of financial leverage is, the smaller the proportion of the capital contributed by the owner in total capital is and the more debt the enterprise will bear. For instance, from 2010 to 2011, this value suddenly rose sharply. It is because that the company issued 23 billion A-share convertible corporate bonds and the raised funds were used in Shandong Liquefied Natural Gas (LNG) project, Jinling oil product quality upgrading project and other projects.

4.3.1 Method of gradual changes

All enterprises want to improve ROE, but the three parts can't be improved at the same time. Through the analysis of method of gradual changes, we can find out enterprises spend time and money in which part of ROE and make what kind of specific decisions each year.

Table 4.16 Data of gradual changes

2010-2011 Gradual changes					
	a0	a1	Δa	ΔXai	order
a1=EAT/Revenue	0.0530	0.0403	-0.0127	-0.0536	3
a2=Revenue/Assets	1.9415	2.2173	0.2758	0.0242	1
a3=Assets/Equity	2.1768	2.2179	0.0411	0.0037	2
SUM				-0.0257	
2011-2012 Gradual changes					
	a0	a1	Δa	ΔXai	order
a1=EAT/Revenue	0.0403	0.0316	-0.0087	-0.0430	3
a2=Revenue/Assets	2.2173	2.2495	0.0322	0.0023	1
a3=Assets/Equity	2.2179	2.2494	0.0315	0.0022	2
SUM				-0.0385	
2012-2013 Gradual changes					
	a0	a1	Δa	ΔXai	order
a1=EAT/Revenue	0.0316	0.0335	0.0019	0.0098	1
a2=Revenue/Assets	2.2495	2.0828	-0.1667	-0.0126	3
a3=Assets/Equity	2.2494	2.2188	-0.0306	-0.0021	2
SUM				-0.0049	

2013-2014 Gradual changes					
	a0	a1	Δa	ΔXai	order
a1=EAT/Revenue	0.0335	0.0232	-0.0103	-0.0477	3
a2=Revenue/Assets	2.0828	1.9471	-0.1357	-0.0070	2
a3=Assets/Equity	2.2188	2.2429	0.0241	0.0011	1
SUM				-0.0536	

From table 4.16, we can see that the influence of net profit margin from 2010 to 2011 was the slightest since the company issued 23 billion A-share convertible bonds in order to raise funds for Shandong Liquefied Natural Gas (LNG) project and other projects. Since the bonds were issued, it must pay interest to creditors. This consequently squeezed the profit space and led to the smaller contribution of net profit margin to ROE growth.

2011-2012 The influence of asset turnover was the largest. That is to say, the way for the company to improve ROE was to increase the efficiency of input to output. In 2012, the company to take it as the unique platform with the ultimate integration of upstream, middle stream and downstream business including gasoline exploration & exploitation, oil refining, chemical industry and the sales of refined oil products. In the coming five years, the company aims to totally dispose the current existing small amount of chemical business. In other words, the advantages of "integration" of the company will become prominent, and the company can give a full play to the advantages of integration so as to improve the efficiency of output.

2012-2013 The influence of net profit margin was the largest. It is because the company successfully completed several overseas acquisitions. Thus, the company not only can gain the profits which belong to it, but also can obtain the profits brought by buying assets.

2013-2014 The influence of financial leverage was the largest. It is because the company carried out the restructuring of oil product sales business, introduced social and private capital and implemented the mixed ownership.

5 Conclusion

The goal of thesis was to assessment financial position by the help of financial statements of China Petrochemical Corporation, for period 2010-2014.

In the second chapter, we introduced some theories for financial analysis, including the definition of balance sheet, income statement and cash flow statement, and the way to analyze these statements with the common-size analysis. We also introduced the financial ratios and DuPont analysis. In the third chapter, we introduced some basic information of China Petrochemical Corporation. The fourth chapter is the core of this thesis. With the methods mentioned in the second chapter, the detailed financial situation of the company was analyzed.

From the common-size analysis we analyzed situation of financial statement in the company we found that the proportion of the account payable decreases while the loan ratio rises. In addition, the company's total shareholders' equity is increasing annually. Although impacted by the fluctuations of international oil price in recent years, the company encounters certain financial risk, in general, the total asset is on the rise with scientific adjustment and by the advantages of the integration trend.

We have calculated a series of financial ratios whose main purpose is to know about the operating efficiency of the company. The annual decrease of the operating margin, profit margin and ROA indicate that the company's profitability has been in the deterioration in the five years. Simultaneously, the long-term solvency of the company is weakening. We shall alleviate these problems with better operation and management. Fortunately, with the analysis of the activity ratio, we realized that the turnover of account receivable for the company is on the decline, which is a good sign. It shows this company has focus on the importance of receivables, liquidity enhanced.

DuPont analysis is used to know about the influence of the three factors, the net profit margin, assets turnover and financial leverage to ROE. Naturally, the company expects an improvement of the three factors, but in reality it is difficult to have all of them improved. For example, the company may improve the asset turnover rate at the expense of the profit margin. With DuPont analysis, we will understand how the company measures these goals annually so that we can obtain its

management strategy.

We have reason to believe that with the help of the statistics data, as one of China's largest integrated energy and chemical companies, China Petrochemical Corporation will earnestly realize the integration and internationalization of resources and the market. It will pay more attention to scientific and technological innovation, management innovation and the improvement of the team quality, making great efforts to make China Petrochemical Corporation a world-class energy and chemical company.

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List of Abbreviation

ART Accounts Receivable Turnover

EAT Earnings after Tax

EBIT Earnings before Interest and Tax

EBT Earnings before Tax

IT Inventory Turnover

NPM Net Profit Margin

ROA Return on Asset

ROE Return on Equity

TAT Total Assets Turnover

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Ostrava dated 09.06.2016

Wang Yu

Student´s name and surname

List of Annexes

Annex 1: Balance Sheet Statement during period of 2010 – 2014 (unit: RMB million)

	2010	2011	2012	2013	2014
Assets					
Current assets					
Cash at bank and on hand	18 140	25 197	10 864	15 101	10 100
Bills receivable	15 950	27 961	20 045	28 771	13 963
Accounts receivable	43 093	58 721	81 395	68 466	90 831
Other receivables	9 880	7 360	8 807	13 165	29 251
Prepayments	5 247	4 096	4 370	4 216	3 780
Inventories	156 546	203 417	218 262	221 906	188 223
Other current assets	594	836	1 008	21 385	23 996
Total current assets	249 450	327 588	344 751	373 010	360 144
Non-current assets					
Available-for-sale financial assets	–	–	–	3 730	868
Long-term equity investments	45 037	47 458	52 061	75 318	80 593
Fixed assets	540 700	565 936	588 969	669 595	703 485
Construction in progress	81 934	111 311	168 977	160 630	177 667
Intangible assets	27 440	34 842	49 834	60 263	78 681
Goodwill	8 298	8 212	6 257	6 255	6 281
Long-term deferred expenses	7 560	9 076	10 246	11 961	14 158
Deferred tax assets	15 578	13 398	6 381	4 141	6 979
Other non-current assets	9 392	12 232	11 046	18 013	22 512
Total non-current assets	735 939	802 465	893 771	1 009 906	1 091 224
Total assets	985 389	1 130 053	1 238 522	1 382 916	1 451 368
Liabilities and shareholders' equity					

Current liabilities					
Short-term loans	29 298	36 985	70 228	108 121	166 688
Bills payable	3 818	5 933	6 656	4 526	4 577
Accounts payable	132 528	177 002	215 628	202 724	198 366
Advances from customers	57 324	66 686	69 299	81 079	89 918
Employee benefits payable	7 444	1 795	1 838	818	839
Taxes payable	33 814	39 622	21 985	35 888	28 677
Other payables	54 871	57 662	61 721	82 917	103 302
Short-term debentures payable	1 000	–	30 000	10 000	–
Non-current liabilities due within one year	5 530	43 388	15 754	45 749	11 890
Total current liabilities	325 627	429 073	493 109	571 822	604 257
Non-current liabilities					
Long-term loans	58 895	54 320	40 267	46 452	67 426
Debentures payable	115 180	100 137	121 849	99 138	83 506
Provisions	15 573	18 381	21 591	26 080	29 715
Deferred tax liabilities	15 017	15 181	7 294	7 977	7 820
Other non-current liabilities	2 415	3 436	3 811	8 187	11 549
Total non-current liabilities	207 080	191 455	194 812	187 834	200 016
Total liabilities	532 707	620 528	687 921	759 656	804 273
Shareholders' equity					
Share capital	86 702	86 702	86 820	116 565	118 280
Capital reserve	29 414	29 583	30 574	36 947	48 703
Other comprehensive income	–	–		407	-7 261
Specific reserve	1 325	3 115	3 550	1 556	491

Surplus reserves	141 711	178 263	184 603	190 337	193 552
Retained earnings	163 132	178 336	209 446	224 534	240 718
Foreign currency translation differences	-1 157	-1 600	-1 619	–	
Total equity attributable to shareholders of the Company	570 346	474 399	513 374	570 346	594 483
Minority interests	52 914	35 126	37 227	52 914	52 612
Total shareholders' equity	623 260	509 525	550 601	623 260	647 095
Total liabilities and shareholders' equity	1 382 916	1 130 053	1 238 522	1 382 916	1 451 368

Annex 2: Income Statement during period of 2010 – 2014 (unit: RMB million)

	2010	2011	2012	2013	2014
Operating income	1 913 182	2 505 683	2 786 045	2 880 311	2 825 914
Less: Operating costs	1 537 131	2 093 199	2 372 235	2 457 041	2 429 017
Sales taxes and surcharges	157 189	189 949	188 483	190 672	191 202
Selling and distribution expenses	31 981	38 399	40 299	44 359	46 274
General and administrative expenses	57 774	63 083	65 590	73 572	70 500
Financial expenses	6 847	6 544	9 819	6 274	9 618
Exploration expenses, including dry holes	10 955	13 341	15 533	12 573	10 969
Impairment losses	15 445	5 811	7 906	4 044	6 839
Add: Gain/(loss) from changes in fair value	-179	1 423	206	2 167	-4 151
Investment income	5 671	4 186	1 540	2 510	8 137
Operating profit	101 352	100 966	87 926	96 453	65 481
Add: Non-operating income	2 108	3 411	4 573	3 481	4 710
Less: Non-operating expenses	1 282	1 739	2 392	2 952	3 710
Profit before taxation	102 178	102 638	90 107	96 982	66 481
Less: Income tax expense	25 335	25 774	23 696	25 605	17 571
Net profit	76 843	76 864	66 411	71 377	48 910
Including: Net profit made by acquiree before the consolidation	3 043				
Attributable to:					
Equity shareholders of the Company	70 713	71 697	63 496	67 179	47 430
Minority interests	6 130	5 167	2 915	4 198	1 480

Basic earnings per share	0,816	0,827	0,562	0,579	0,406
Diluted earnings per share	0,808	0,795	0,542	0,543	0,406
Net profit	76 843	76 864	66 411	71 377	48 910
Other comprehensive income					
Items that may be reclassified subsequently to profit or loss (net of tax and after reclassification adjustments):					
Cash flow hedges	-221	142	-151	604	-4 485
Changes in fair value of available-for-sale financial assets	-9	-15	26	1 314	-1 225
Share of other comprehensive loss of associates and jointly controlled entities	-533	-179	80	-297	-3 042
Foreign currency translation differences	-1 360	-676	-44	-689	-514
Total other comprehensive income/(loss)	-2 123	-728	-89	932	-9 266
Total comprehensive income	74 720	76 136	66 322	72 309	39 644
Attributable to:					
Equity shareholders of the Company	68 706	71 207	63 431	68 359	39 762
Minority interests	6 014	4 929	2 891	3 950	-118

Annex 3: Cash Flow Statement during period of 2010 – 2014 (unit: RMB million)

	2010	2011	2012	2013	2014
Cash flows from operating activities:					
Cash received from sale of goods and rendering of services	2 215 212	2 889 482	3 219 487	3 214 962	3 129 123
Rentals received	392	437	–	–	–
Refund of taxes and levies		–	1 200	1 747	1 600
Other cash received relating to operating activities	8 279	12 316	17 864	22 396	44 214
Sub-total of cash inflows	2 223 883	2 902 235	3 238 551	3 239 105	3 174 937
Cash paid for goods and services	-1 758 556	-2 398 623	-2 725 034	-2 691 495	-2 589 649
Cash paid for operating leases	-12 414	-12 611			
Cash paid to and for employees	-30 754	-45 617	-51 724	-55 731	-56 396
Value added tax paid	-63 125	-71 311	–	–	–
Income tax paid	-14 158	-29 798	–	–	–
Taxes paid other than value added tax and income tax	-154 716	-176 474	–	–	–
Payments of taxes and levies	–	–	-292 480	-296 896	-292 259
Other cash paid relating to operating activities	-18 898	-16 620	-25 851	-43 090	-88 286
Sub-total of cash outflows	-2 052 621	-2 751 054	-3 095 089	-3 087 212	-3 026 590
Net cash flow from operating activities	171 262	151 181	143 462	151 893	148 347
Cash flows from investing activities:					
Cash received from disposal of investments	1 687	3 039	1 384	4 198	3 874

Cash received from returns on investments	1 335	2 961	2 429	1 496	2 312
Net cash received from disposal of fixed assets, intangible assets and other long-term assets	16 145	1 216	325	1 550	1 020
Cash received on maturity of time deposits with financial institutions	3 626	6 383	–	–	–
Cash received from derivative financial instruments	4 646	3 679	–	–	–
Other cash received relating to investing activities	660	1 584	6 124	2 499	2 066
Sub-total of cash inflows	28 099	18 862	10 262	9 743	9 272
Cash paid for acquisition of fixed assets, intangible assets and other long-term assets	-114 711	-142 813	-158 148	-154 946	-124 381
Cash paid for acquisition of investments	-11 310	-7 488	-10 246	-33 487	-13 855
Cash paid for acquisition of time deposits with financial institution	-3 522	-5 801	–	–	–
Cash paid for derivative financial instruments	-5 273	-3 768	–	–	–
Other cash paid relating to investing activities	-134 816	–	-5 147	-50	-1 137
Net cash paid for the acquisition of subsidiaries and other business entities	-106 717	–	–	–	-2 532
Sub-total of cash outflows	–	-159 870	-173 541	-188 483	-141 905
Net cash flow from investing activities	–	-141 008	-163 279	-178 740	-132 633
Cash flows from financing activities:					

Cash received from borrowings	663 491	536 397	–	–	–
Cash received from issuance of 2011 Convertible Bonds, net of issuing expenses		22 889	–	–	–
Cash received from issuance of corporate bonds	21 000	5 000	–	–	–
Cash received from issuance of shares	2		–	–	–
Cash received from contribution from minority shareholders of subsidiaries	408	117	–	–	–
Cash received from capital contributions	–	–	1 474	32 102	4 128
Including: Cash received from minority shareholders' capital contributions to subsidiaries	–	–	1 474	12 696	4 120
Cash received from borrowings	–	–	930 317	1 142 890	1 128 447
Sub-total of cash inflows	684 901	564 403	931 791	1 174 992	1 132 575
Cash repayments of borrowings	-672 804	-532 667	-888 567	-1 105 457	-1 114 481
Cash repayments of corporate bonds and partial redemption of 2007 Convertible Bonds	-31 000	-6 036	–	–	–
Cash paid for dividends, profits distribution or interest	-23 130	-26 368	-37 444	-37 967	-39 494
Dividends paid to minority shareholders of subsidiaries	-1 051	-1 812	–	–	–
Cash paid for acquisition of minority interests from subsidiaries, net	–	-36	–	–	–
Including: Subsidiaries' cash payments for	–	–	-2 807	-1 346	-1 674

distribution of dividends or profits to minority shareholders					
Distributions to Sinopec Group Company	-13 210	–	–	–	–
Other cash paid relating to financing activities	–	–	-152	-49	-21
Sub-total of cash outflows	-741 195	-566 919	-926 163	-1 143 473	-1 153 996
Net cash flow from financing activities	-56 294	-2 516	5 628	31 519	-21 421
Effects of changes in foreign exchange rate	-25	-18	-2	-82	16
Net increase/(decrease) in cash and cash equivalents	8 226	7 639	-14 191	4 590	-5 691